

Safety data sheet

Page: 1/9

BASF Safety data sheet

Date / Revised: 07.02.2014

Product: **Nodulator® Lupin**

Version: 2.0

(30585884/SDS_GEN_AU/EN)

Date of print 07.02.2014

1. Substance/preparation and company identification

Nodulator® Lupin

Use: Biological beneficial agent

Manufacturer/supplier:

BASF Agricultural Specialties Pty Ltd
1205 Old Pacific Highway, Somersby
NSW, 2250, AUSTRALIA
Telephone: +61 2 4340-2246
Telefax number: +61 2 4340-2243

Emergency information:

BASF Emergency Advice Number: 1800 803 440 (24h) [within Australia]
BASF Emergency Advice Number: + 61 3 8855 6666 [outside Australia]

2. Hazard identification

No particular hazards known.

NON-HAZARDOUS SUBSTANCE, NON-DANGEROUS GOODS

3. Composition/information on ingredients

Chemical nature

Contains: biological beneficial organism

Hazardous ingredients

Palygorskite ($[\text{Mg}(\text{Al}_{0.5-1}\text{Fe}_{0-0.5})\text{Si}_4(\text{OH})\text{O}_{10}\cdot 4\text{H}_2\text{O}]$)

Content (W/W): < 40 %
CAS Number: 12174-11-7

Calcium sulphate

Content (W/W): < 30 %
CAS Number: 7778-18-9

ammonium chloride

Content (W/W): < 5 %
CAS Number: 12125-02-9
Hazard symbol(s): Xn
R-phrases(s): 22, 36

Quartz (SiO_2)

Content (W/W): < 5 %
CAS Number: 14808-60-7

The wording of the hazard symbols and R-phrases is specified in section 16 if dangerous ingredients are mentioned.

4. First-Aid Measures

General advice:

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air.

On skin contact:

Wash thoroughly with soap and water.

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:

Rinse mouth and then drink plenty of water.

Note to physician:

Symptoms: No significant reaction of the human body to the product known.

Treatment: Symptomatic treatment (decontamination, vital functions).

5. Fire-Fighting Measures

Suitable extinguishing media:

water spray, dry powder, foam

Unsuitable extinguishing media for safety reasons:

carbon dioxide

Specific hazards:
carbon monoxide, carbon dioxide, nitrogen oxides
The substances/groups of substances mentioned can be released in case of fire.

Special protective equipment:
Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:
Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire.

6. Accidental Release Measures

Personal precautions:
Avoid dust formation. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

Environmental precautions:
Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

Methods for cleaning up or taking up:
For small amounts: Contain with dust binding material and dispose of.
For large amounts: Sweep/shovel up.
Avoid raising dust. Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

7. Handling and Storage

Handling

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

Protection against fire and explosion:
Avoid dust formation. Dust can form an explosive mixture with air. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

Storage

Segregate from foods and animal feeds.
Further information on storage conditions: Keep away from heat. Protect against moisture. Protect from direct sunlight. Store protected against freezing.

Protect from temperatures below: 5 °C
Changes in the properties of the product may occur if substance/product is stored below indicated temperature for extended periods of time.

Protect from temperatures above: 25 °C

Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

8. Exposure controls and personal protection

Components with occupational exposure limits

Calcium sulphate, 7778-18-9;

TWA value 10 mg/m³ (OEL (AU)), Inhalable dust

ammonium chloride, 12125-02-9;

TWA value 10 mg/m³ (ACGIHTLV), fumes/smoke

STEL value 20 mg/m³ (ACGIHTLV), fumes/smoke

Quartz (SiO₂), 14808-60-7;

TWA value 0.1 mg/m³ (AU NOEL), Respirable dust

TWA value 0.1 mg/m³ (AU NOEL), Respirable dust

See Silica, Crystalline.

TWA value 0.1 mg/m³ (OEL (AU))

(OEL (AU)), dust

Included in the regulation, but with no data values - See the regulation for further details

Personal protective equipment

Respiratory protection:

Respiratory protection not required.

Hand protection:

Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact

(Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) and other

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

9. Physical and Chemical Properties

Form: solid, granules

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Colour:	grey
Odour:	mild
pH value:	approx. 6 - 7 (1 %(m), 20 °C)
Melting temperature:	not applicable
boiling temperature:	not applicable
Flash point:	not applicable
Flammability:	Based on the structure or composition there is no indication of flammability
Lower explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Upper explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Self ignition:	Based on its structural properties the product is not classified as self- igniting.
Explosion hazard:	Product is not explosive, however a dust explosion could result from an air / dust mixture.
Fire promoting properties:	Based on its structural properties the product is not classified as oxidizing.
Vapour pressure:	not applicable
Bulk density:	200 - 1,200 kg/m ³
Relative vapour density (air):	not applicable
Solubility in water:	insoluble
Partitioning coefficient n-octanol/water (log Pow):	not applicable
Viscosity, dynamic:	not applicable, the product is a solid

10. Stability and Reactivity

Conditions to avoid:
See MSDS section 7 - Handling and storage.

Thermal decomposition: No decomposition if stored and handled as prescribed/indicated.

Substances to avoid:
strong acids, strong bases, strong oxidizing agents

Hazardous reactions:
No hazardous reactions if stored and handled as prescribed/indicated.

Hazardous decomposition products:
No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological Information

Acute toxicity

Assessment of acute toxicity:
Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.

Irritation

Assessment of irritating effects:
Not irritating to the skin. Not irritating to the eyes.

Sensitization

Assessment of sensitization:
There is no evidence of a skin-sensitizing potential.

Repeated dose toxicity

Assessment of repeated dose toxicity:
The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Quartz (SiO₂)

Assessment of repeated dose toxicity:
The substance may cause increase in lung mass and lung tissue changes after repeated inhalation.

Genetic toxicity

Assessment of mutagenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

Carcinogenicity

Assessment of carcinogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. The results of various animal studies gave no indication of a carcinogenic effect.

Reproductive toxicity

Assessment of reproduction toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity

Assessment of teratogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

Other relevant toxicity information

Misuse can be harmful to health.

12. Ecological Information

Ecotoxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms.

Toxicity to fish:

No data available.

Aquatic invertebrates:

No data available.

Aquatic plants:

No data available.

Mobility

Assessment transport between environmental compartments:

No data available.

Persistence and degradability

Assessment biodegradation and elimination (H₂O):

The product has not been tested. The statement has been derived from the properties of the individual components.

Biodegradable.

Bioaccumulation potential

Assessment bioaccumulation potential:

The product has not been tested. The statement has been derived from the properties of the individual components.

Bioaccumulation potential:

At the present state of knowledge, no negative ecological effects are expected.

Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control.

13. Disposal Considerations

Must be disposed of or incinerated in accordance with local regulations.

Contaminated packaging:

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

14. Transport Information

Domestic transport:

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

Poisons Schedule: Not scheduled

Regulations of the European union (Labelling)

EEC Directives:

The product does not require a hazard warning label in accordance with EC Directives.

Other regulations

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

Registration status:

AICS, AU released / exempt

crop protection product

16. Other Information

Full text of hazard symbols and R-phrases if mentioned as hazardous components in section 3:

Xn	Harmful.
22	Harmful if swallowed.
36	Irritating to eyes.

Vertical lines in the left hand margin indicate an amendment from the previous version.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.